WHAT IS CLAIMED IS:

1. In a system a process for automatically performing a frequency response equalization tuning, said process comprising the steps of:

installing a speaker in an electronic device;

commanding a central processing unit (CPU) in said electronic device to simulate and generate a standard sound signal having a predetermined bandwidth through a sound control circuit in said electronic device;

commanding a digital equalizer in said electronic device to receive said standard sound signal and outputting said standard sound signal through a speaker in said electronic device;

commanding a microphone to receive said standard sound signal for sending back to said CPU through said sound control circuit;

commanding said CPU to perform a frequency response matching on said received sound signal with respect to a predetermined ideal frequency response data;

calculating a set of equalization tuning gains in said predetermined bandwidth;

inputting said gains in said digital equalizer for storing; and

commanding said digital equalizer to automatically perform a frequency response equalization tuning on said speaker, thereby maintaining said output sound signal at an optimum frequency response state.

2. The process of claim 1, wherein said electronic device is manufactured to have said predetermined ideal frequency response data with said predetermined bandwidth based on specifications of said speaker to be installed in said electronic device prior to storing said ideal frequency response data in a memory of said electronic device so that when said electronic device is enabled a predetermined software in said CPU reads said ideal frequency response data

7

from said memory for generating said standard sound signal having said predetermined bandwidth through said sound control circuit.

3. The process of claim 1, wherein after said digital equalizer has received said sound signal from said sound control circuit, further comprising the steps of commanding said digital equalizer to compensate said sound signal based on a predetermined initial gain, and sending said compensated sound signal to said speaker for outputting.

4. The process of claim 1, wherein after said microphone has received said compensated sound signal, further comprising said steps of commanding said sound control circuit to convert said sound signal into a digital sound data, and sending said digital sound data back to said CPU.

5. The process of claim 1, further comprising said steps of:

commanding said CPU to perform a frequency response matching on said received sound signal with respect to said outputted standard sound signal based on a plurality of sampling frequencies;

calculating a set of equalization tuning gains corresponding to said frequency response compensation performed in said speaker in each of said plurality of sampling frequencies; and

inputting said gains in said digital equalizer for storing.

6. The process of claim 1, wherein said standard sound signal having said predetermined bandwidth is a standard sound file in an audible frequency range of 20Hz and 20KHz.